

## Exhibit 300: Capital Asset Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

**Date Investment First Submitted:** 2009-06-30  
**Date of Last Change to Activities:** 2012-08-23  
**Investment Auto Submission Date:** 2012-02-27  
**Date of Last Investment Detail Update:** 2012-02-27  
**Date of Last Exhibit 300A Update:** 2012-08-23  
**Date of Last Revision:** 2012-08-23

**Agency:** 021 - Department of Transportation      **Bureau:** 12 - Federal Aviation Administration

**Investment Part Code:** 01

**Investment Category:** 00 - Agency Investments

**1. Name of this Investment:** FAAXX216: Weather and Radar Processor (WARP)

**2. Unique Investment Identifier (Ull):** 021-448268496

#### Section B: Investment Detail

- Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

The Weather and Radar Processor (WARP) program began in 1994. Its mission is to provide consistent integrated real-time aviation weather (wx.) information for the National Airspace System (NAS). Systems before WARP used older radars whose wx. displays were inaccurate & inconsistent. Access to other wx. data was slow & unreliable. WARP closes these performance gaps. WARP supports the Department of Transportation's (DOTs) Strategic Plan (2011-2016) and the FAA's Destination 2025 Plan, specifically in the goal of Safety. WARP reduces air traffic delays caused by thunderstorms & supplies forecast wind data that's crucial to automated traffic-flow tools. For Budget Year 13, WARP will continue to provide these capabilities & align w/ the NAS Enterprise Architecture. The WARP Program Office will continue to provide transparency, program mgmt & governance to keep the program on schedule & w/in budget to meet benefits. WARP is operational at all Air Route Traffic Control Centers (ARTCCs) (21), the Air Traffic Control System Command Center (ATCSCC) (1), the William J. Hughes Technical Center (WJHTC) (2), & one (1) at the contractor facility in Melbourne, FL. WARP provides wx. information to FAA Air Traffic Controllers (ATCs), FAA Traffic Unit Management (TMU) specialists, and NWS Meteorologists. WARP gathers NEXRAD data & processes it into wx. displays for ATCs' screens. It receives aviation wx. data from the NWS & other sources. WARP closes performance gaps by providing a full spectrum of aviation wx. information in real-time to other

NAS systems. It meets the rigorous Communications Security & data integrity directives. Sustainment activities will introduce new technology resulting in lower operating costs. This will sustain WARP until the implementation of the Next Generation Air Transportation System (NextGen). Planned actions include, but are not limited to hardware replacement/upgrade. Extension of funding does not change WARP functionality. The WARP Program shares solutions w/ NextGen to achieve NextGen goals at a lesser cost & ahead of schedule. This program has dependencies with the Aviation Surface Weather Observation Network (ASWON), FAA Telecommunications Infrastructure (FTI), En Route Automation Modernization (ERAM), ERAM DPosition & Enhancements, Oceanic Automation System: Advanced Technologies and Oceanic Procedures (ATOP), Traffic Flow Management (TFM), & NextGen Network Enabled Weather (NNEW).

**2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

Systems before WARP used older radars whose weather displays were inaccurate & inconsistent. Access to other weather data was slow & unreliable. WARP closes these performance gaps. Without funding for WARP, NAS air traffic operations would be impacted as Air Traffic Controllers (ATCs) will lose vital weather radar information from their traffic displays. This will jeopardize flight safety and reduce the traffic throughput of the NAS. This will lead to more general aviation accidents associated with thunderstorms and increase traffic delays for the flying public. The WARP system supports the Department of Transportation's (DOTs) Strategic Plan (2011-2016) and the FAA's Destination 2025 Plan. Specifically supported is the FAA/DOT Measurement of Safety. The planned DOT "Outcome" of this is a reduction in transportation related fatalities and injuries. This is associated with the FAA's Goal Area titled: "Next level of Safety". The "Outcome" for this is to "Strive to eliminate fatalities on commercial service aircraft in the United States (U.S.), with specific focus centered on "Commercial Air Carrier Fatality Rate", where a reduction of commercial air carrier fatalities per 100 million persons on board by 24% over a nine (9)-year period (2010-2018), with no more than 6.2 in 2018. This is specific to both, the FAA Destination 2025 Plan and the DOT Strategic Plan (FY11-FY16). An FAA "Outcome" also associated with the FAA Goal Area titled: "Next Level of Safety" is to "Reduce aviation risk through all phases of flight (gate-to-gate)." In relation to the "FAA Destination 2025" Plan goals include: "Implement 40 percent of mitigating strategies for the top five (5) airport risk areas", "Maintain the rate of serious runway incursions at or below 20 per 1000 events" and "Ensure no cyber security event significantly degrades or disables a mission FAA system." Another FAA "Outcome" is to: "Reduce the general aviation fatal accident rate." This is supported by both, the DOT's Strategic Plan (2011-2016) and the FAA's Destination 2025 Plan. The goal is to "Reduce general aviation fatality rate to less than 1 fatality per 100,000 flight hours by 2018." The DOT's Strategic Plan also includes the following goals: "Reduce the total number of runway incursions 10 percent from the FY2008 baseline of 1009 to 909 by the end of FY2013." This is a high priority goal.

**3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

In PY11 WARP completed maintenance release 1.4 for continued service availability of the

WARP System, completed the System and Accreditation Package (SCAP), conducted Site Acceptance Test (SAT) of the WARP Sustain Configuration - Segment 1 and completed Development Test and Evaluation (DT&E) of WARP Sustain Configuration - Segment 2.

**4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

In 2012 WARPP will complete Operational Test and Evaluation (OT&E), initiate first-site delivery and complete last site delivery of the WAREP Sustain Segment 2 configuration.

**5. Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

1993-10-01

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$1.4	\$0.0	\$0.0	\$0.0
DME (Excluding Planning) Costs:	\$190.4	\$2.1	\$2.5	\$0.5
DME (Including Planning) Govt. FTEs:	\$2.5	\$0.0	\$0.0	\$0.0
Sub-Total DME (Including Govt. FTE):	\$194.3	\$2.1	\$2.5	\$0.5
O & M Costs:	\$144.0	\$14.8	\$14.5	\$15.0
O & M Govt. FTEs:	\$12.3	\$1.9	\$2.0	\$2.1
Sub-Total O & M Costs (Including Govt. FTE):	\$156.3	\$16.7	\$16.5	\$17.1
Total Cost (Including Govt. FTE):	\$350.6	\$18.8	\$19.0	\$17.6
Total Govt. FTE costs:	\$14.8	\$1.9	\$2.0	\$2.1
# of FTE rep by costs:	90	12	12	12
Total change from prior year final President's Budget (\$)		\$0.0	\$0.0	
Total change from prior year final President's Budget (%)		0.00%	0.00%	

2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:

## Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	6920	<a href="#">DTFAWA-05-C-00027</a>									
Awarded	6920	<a href="#">DTFAWA-10-C-00079</a>									

**2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:**

WARP is operational, thus, not required to use EVM. However, EVM is required in the contract for the 3 CPFF items. The WARP contract has 3 FFP items that were not subject to EVM requirements at the time of contract award due to steady state exemption. While recognizing the inherent risk to FAA, minimal/limited funding for T&M tasks were planned for & deemed necessary to provide program flexibility to incorporate last-minute/emergency interim solutions to ensure functionality with the existing system. These T&M tasking efforts are expected to be of short duration (i.e., less than 6 month efforts) in support of efforts due to unforeseen circumstances and/or unquantifiable work. In terms of management controls, the cost and schedule are monitored constantly by the FAA team and project manager.

## Exhibit 300B: Performance Measurement Report

### Section A: General Information

**Date of Last Change to Activities:** 2012-08-23

### Section B: Project Execution Data

**Table II.B.1 Projects**

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
1	Sustainment Activities-Segment 1 and 2	Develop minor upgrades to hardware and software until NEXTGEN is operational.			
2	Security Requirements	Develop and implement annual system authorizations security requirements.			
3	Telecommunication Requirements	Develop and implement telecommunications software support for WARP to transition off of the remaining interfaces of the NAS Data Information Network (NADIN) system to FAA Telecommunications Infrastructure (FTI).			

### Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
1	Sustainment Activities-Segment 1 and 2							

## Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
2	Security Requirements							
3	Telecommunication Requirements							

## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
1	Developmental Test and Evaluation (DT&E) Completed - Segment 2 (APB Milestone)	Complete Developmental Test and Evaluation (DT&E) - Segment 2	2011-09-30	2011-09-30	2011-09-30	213	0	0.00%
3	Telecommunications Requirements - A - Segment 2	Develop Telecommunications Requirements - Segment 2	2012-06-15	2012-06-15		183	-77	-42.08%
3	Telecommunications Requirements - B - Segment 2	Implement Telecommunications Requirements - Segment 2	2012-09-30	2012-09-30		183	0	0.00%



## Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Customer Satisfaction - Rate of positive responses from users as documented in questionnaire	percentage of satisfied customers	Customer Results - Service Quality	Over target	80.000000	85.000000	66.000000	85.000000	Semi-Annual
Safety - Accident Rate	number of accidents	Mission and Business Results - Services for Citizens	Under target	3.500000	2.000000		2.000000	Semi-Annual
En-Route weather-related delay hours	Number of hours	Mission and Business Results - Services for Citizens	Under target	2340.000000	1500.000000	2480.000000	1500.000000	Semi-Annual
Air Route Traffic Control Center (ARTCC) radar mosaic generation time.	Air Route Traffic Control Center (ARTCC) % rate	Process and Activities - Cycle Time and Timeliness	Over target	99.950000	99.950000	99.950000	99.950000	Semi-Annual
System availability (Uptime)	availability of system	Technology - Reliability and Availability	Over target	99.960000	99.960000	99.920000	99.960000	Monthly
False weather echoes in mosaic displays (composite of all radar data)	% of false alarms	Technology - Reliability and Availability	Under target	5.000000	5.000000	5.000000	5.000000	Semi-Annual